

## LED SPOT

### STARTLINE



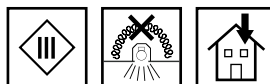
## STARTLINE RECESSED MOUNTED LED SPOT

Its modern and sophisticated design distinguishes StartLine from traditional spotlights.

The ribbed surface of the LED cover ensures a homogeneous light distribution and gives the spot a fresh and bright design.

### Typical applications

- Furniture lighting
- Residential Lighting
- Retail lighting



### StartLine

- **CONSTANT-CURRENT OR VOLTAGE-DRIVEN**
- **5 YEARS GUARANTEE**
- **MADE IN ITALY**



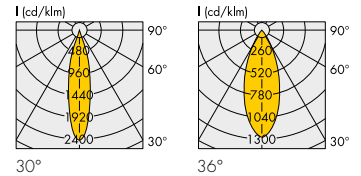
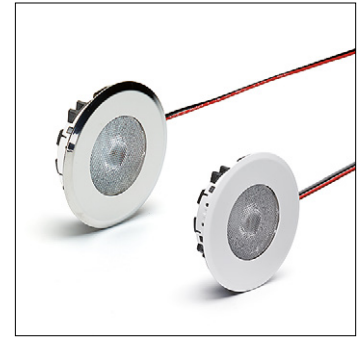
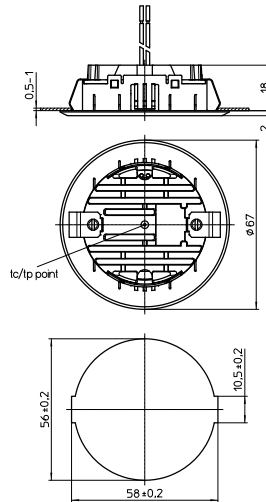
## StartLine – 700 mA

**Complete LEDSpot equipped with optics, heat sink, leads and frame**

### Technical notes

- Steel frame: round
- For cut-out:  $\varnothing$  56 mm
- LEDSpot with 3 LEDs and with thermoplastic heat sink
- Optics beam angle: 30° or 36°
- Colour accuracy initially: 3 SDCM
- CRI R<sub>a</sub>: 80
- Leads: Cu tinned, stranded conductors AWG22, PVC-insulation, length: 250 mm
- Use of external LED constant-current drivers
- Snap-in clips for easy installation
- Degree of protection: IP20 (front part: IP40)
- Allowed ambient temperature: 0 to 35 °C
- Allowed storage temperature: -30 to 60 °C
- Lumen maintenance L70/B30: 50,000 hrs. ( $t_c/t_p = 70$  °C)
- Max. operating temperature at  $t_c/t_p$  point: 80 °C
- Weight: 40 g
- Packaging unit: 45 pcs.

### LCH-016



Type	Description	LEDSpot version	Colour	Correlated colour temperature K	Typ. luminous flux and typical voltage (U <sub>typ.</sub> ) and power consumption (P <sub>el</sub> )*			Light intensity at max. current Candela		Energy efficiency at max. current
					350 mA lm	500 mA lm	700 mA lm	30°	36°	
					P <sub>el</sub> = 0.98 W U <sub>typ.</sub> = 2.8 V	P <sub>el</sub> = 1.45 W U <sub>typ.</sub> = 2.9 V	P <sub>el</sub> = 2.1 W U <sub>typ.</sub> = 3 V			
LCH-016	Start 219 3000K	<b>A</b>	warm white	3000	130	170	220	530	280	A++
LCH-016	Start 219 4500K	<b>B</b>	neutral white	4500	140	190	250	555	305	A++

Emission data at  $t_j = 85$  °C | \* Production tolerance of luminous flux, voltage and power consumption:  $\pm 7\%$  | Further colour temperatures on request

Frame colour	Ref. No. <b>A</b> (warm white)		Ref. No. <b>B</b> (neutral white)	
	30°	36°	30°	36°
silver	<b>561799</b>	<b>561801</b>	<b>561803</b>	<b>561805</b>
white	<b>561800</b>	<b>561802</b>	<b>561804</b>	<b>561807</b>

Silver brushed or further colours on request

### LED drivers

You will find more information about our LED drivers on our website: [www.vossloh-schwabe.com](http://www.vossloh-schwabe.com)

Capacity range W	Output current DC mA	Output voltage DC V	Ref. No.	Version	Current setting	Dimming	Max. service life time (hrs.)	Dimensions: mm (LxWxH)
<b>700 mA</b>								
5.6	700	2.8–8	<b>186348</b>	EasyLine	—	—	50,000	81.6x42.5x23
17.5	700	2–25	<b>186681</b>	ComfortLine	—	—	100,000	128x37x28
<b>350 mA</b>								
8.75	350	2–25	<b>186519</b>	ComfortLine	—	—	100,000	65x30.7x21.5
11	350	2–32	<b>186679</b>	ComfortLine	—	—	100,000	128x37x28

Please ensure you choose the correct LED driver for the module in question and that the respective output parameters (current, voltage, wattage) are correct.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

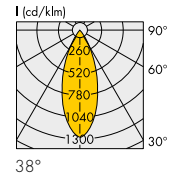
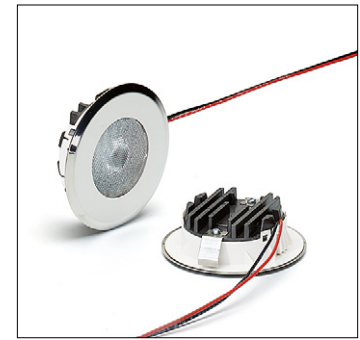
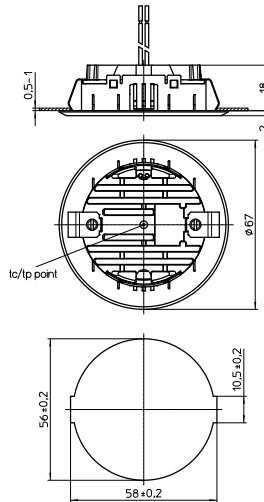
## StartLine – 12 V DC

**Complete LEDSpot equipped with optics, heat sink, leads and frame**

### Technical notes

Steel frame: round, silver  
 For cut-out:  $\varnothing$  56 mm  
 LEDSpot with 3 LEDs and with thermoplastic heat sink  
 Optics beam angle: 38°  
 CRI  $R_a$ : 80  
 Leads: Cu tinned, stranded conductors AWG22,  
 PVC-insulation, length: 250 mm  
 Use of external LED constant-voltage converter  
 Snap-in clips for easy installation  
 Degree of protection: IP20 (front part: IP40)  
 Allowed ambient temperature: 0 to 40 °C  
 Allowed storage temperature: -30 to 60 °C  
 Lumen maintenance L70/B30:  
 50,000 hrs. ( $t_c/t_p = 70$  °C)  
 Max. operating temperature at  $t_c/t_p$  point: 90 °C  
 Weight: 40 g  
 Packaging unit: 45 pcs.

### LCH-052



Type	Description	LEDSpot version	Colour	Correlated colour temperature K	Max. power consumption W	Typ. luminous flux* lm	Typ. CRI $R_a$	Light intensity Candela	Energy efficiency
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### StartLine 12 V DC – Frame colour: silver

LCH052	Start Wi 12 V	<b>569251</b>	warm white	3000	2	125	80	190	A+
LCH052	Start Wi 12 V	<b>568263</b>	neutral white	4000	2	140	80	210	A++

Emission data at  $t_1 = 85$  °C | \* Production tolerance of luminous flux, voltage and power consumption:  $\pm 7\%$  | Further colour temperatures or frame colours on request

### LED converters

You will find more information about our LED converter on our website: [www.vossloh-schwabe.com](http://www.vossloh-schwabe.com)

Capacity range W	Mains voltage 50–60 Hz V $\pm 10\%$	Output current A	Ref. No.	Version	Max. service life time hrs.	Service life time at °C	Connection	Dimensions LxWxH mm
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### 12 V

6	220–240	0–0.5	<b>186412</b>	EasyLine	50,000	55	Preassembled leads	81.6x42.5x23
12	220–240	0–1	<b>186204</b>	ComfortLine	100,000	65	Screw terminals	103.5x36x22
20	220–240	0–1.68	<b>186620</b>	EasyLine	50,000	65	Screw terminals	123x45x19
60	220–240	0–5	<b>186621</b>	EasyLine	50,000	70 / 80	Screw terminals	180x52x30
75	220–240	0–6.25	<b>186622</b>	EasyLine	50,000	75	Screw terminals	180x52x30
100	220–240	0–8.4	<b>186623</b>	EasyLine	50,000	70 / 80	Screw terminals	300x40x30

Please ensure you choose the correct LED driver for the module in question and that the respective output parameters (current, voltage, wattage) are correct.

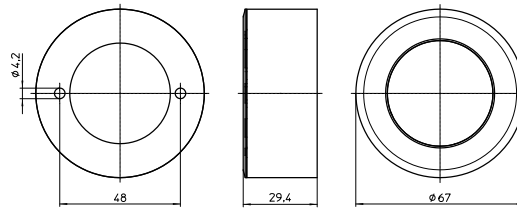
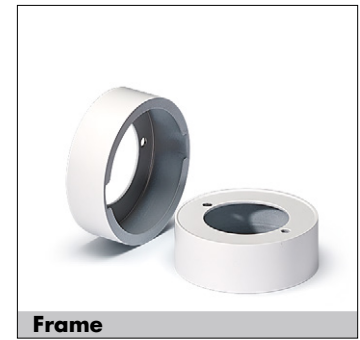
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## Surface Kit with Mounted LEDSpot

Metal frame to use LEDSpot as surface mounting spots  
 Two single pole terminals for electrical connection inside the kit (frame + spot)  
 Fixation by self tapping screws  
 Packaging unit: 90 pcs.

**Ref. No.: 554845** Frame colour: white

**Ref. No.: 554843** Frame colour: silver



## StartLine – Installation Instruction

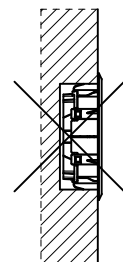
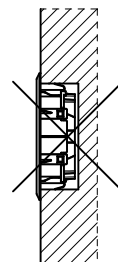
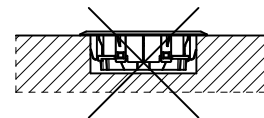
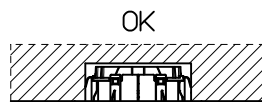
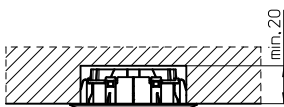
### General safety information

- VS product may only be installed and commissioned by authorised and fully qualified staff.
- These instructions must be carefully read before installing and commissioning the system, as this is the only way to ensure safe and correct handling.
- An external driver for max. 700 mA or 12 V converter are required.
- Before any work is carried out on the equipment, it must be disconnected from the mains.
- All valid safety and accident-prevention regulations must be observed.
- The products should never be inexpertly opened. Repairs may only be undertaken by the manufacturer.
- Dimming: The dimming characteristics of the installed driver have to be observed.
- The photo biological safety of the LED modules is classified into risk groups in accordance with EN 62471: 2008 and IEC TR 62778: risk group 1.

See drawing and cut out for each product on previous pages.

### Built-in

### Correct position



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## All VS LED Spots at a glance

### Tiny

LEDSpot with optics, leads and metal frame  
For cut-out: Ø 26 mm  
Beam angle: 36°  
Lumen output: max. 140 lm  
Versions: CC, CV, Kit



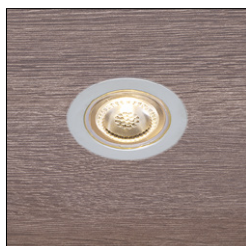
### StartLine

LEDSpot with optics, heat sink, leads and frame  
For cut-out: Ø 56 mm  
Beam angle: 30°, 36°, 38°  
Lumen output: max. 250 lm  
Versions: CC, CV



### EffectLine

LEDSpot with optics, heat sink, leads and metal frame  
For cut-out: Ø 37 mm  
Beam angle: 10°, 16°, 28° or 38°  
Lumen output: max. 250 lm  
Versions: CC



### IPLine

LEDSpot IP54 with optics, heat sink, leads and metal frame  
For cut-out: Ø 56 mm  
Beam angle: 40°  
Lumen output: max. 330 lm  
Versions: CC



### FlatLine

LEDSpot with optics, leads and metal frame  
For cut-out: Ø 56 mm  
Beam angle: 60°, 70°  
Lumen output: max. 270 lm  
Versions: CC, CV, TW, Kit



### DisLine

LEDSpot with optics, heat sink, leads and metal frame  
For cut-out: Ø 56 mm  
Beam angle: 45°, 55°  
Lumen output: max. 220 lm  
Versionen CC



### SmartLine COB

LEDSpot with optics, heat sink, leads and metal frame  
For cut-out: Ø 56 mm  
Beam angle: 40°  
Lumen output: max. 330 lm  
Versions: CC



### SoftLine

LEDSpot with heat sink, leads and metal frame  
For cut-out: Ø 56 mm  
Beam angle: 90°  
Lumen output: max. 225 lm  
Versions: CV



### SmartLine SMD

LEDSpot with optics, heat sink, leads and metal frame  
For cut-out: Ø 56 mm  
Beam angle: 36°, 40°  
Lumen output: max. 250 lm  
Versions: CC, CV



### Revo

LEDSpot with optics and frame  
For cut-out: 67.5x25x5 mm  
Beam angle: 60°, 70°  
Lumen output: max. 255 lm  
Versions: CC, CV, TW



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